

Q&A /// INTERVIEW WITH AN INDUSTRY INSIDER



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“Our larger customers with global supply chains are all subject to the same pressures from their stakeholders to decarbonize both their operations and their supply chains.”

Bodycote recently announced that two of its U.K. facilities are operating with zero carbon emissions. How was this made possible and why was it deemed necessary?

We're proud to announce that Derby and Rotherham are operating with zero emissions. They are part of a strategic pilot program, and they're the first two sites where we've achieved this milestone. The transition to zero emissions has been achieved through a combination of energy efficiency, electrification, and use of renewable energy. Both sites use 100 percent renewable electricity; the sites run without the use of fossil fuels; and, importantly, we've achieved the milestone without the use of carbon offsets.

That's a key part of our decarbonization strategy — that we follow a science-based approach, i.e. reducing the impact that we have and not offsetting the impact that we have.

What steps were taken to reach this milestone?

This has been part of a longer-term transformation effort, and we have a much broader program across the business of energy-efficiency improvements and capital investments where — supported by our technical services colleagues — we look to drive our program of energy efficiency and decarbonization. This has been achieved over the past several years where we have taken steps to significantly reduce the energy that we use at those sites, then to ensure that we're using electrified processes and equipment, and finally to use renewable electricity for the site's power needs.

To give you one example of an energy efficiency improvement, at our Derby site we recently introduced an adiabatic cooling system, which replaced the previous evaporative cooling towers used to cool the furnaces. This adiabatic system is a closed loop system, so it has lower maintenance requirements.

There's no need for chemical dosing. There's real maintenance savings, but also on the energy and water consumption side, there's some enormous savings.

It's over 70 percent lower in terms of its energy consumption vs. the previous system that we had at that site. It's important that we first and foremost, become as efficient as possible in our operations, and then take the step to renewable electricity. This has been something that's becoming increasingly important to our customers, particularly those who have challenging carbon reduction targets for themselves.

Outsourcing to Bodycote is one of the best ways that they can achieve their carbon reduction targets. By outsourcing heat treatment and because we have a science-based carbon reduction target, they can rely on the fact that, even over time, across our worldwide portfolio of sites, our emissions will come down in line with a 1.5-degree trajectory.

It's important for our customers to know that they can trust us to be a decarbonization partner for the long term.

What do these facilities specialize in?

They process several different products there, but particularly turbine blades for jet engines. It's a great example of how the services which we provide are critical to so many components that are used in our daily modern lives. Turbine blades are a good example — an airplane wouldn't be able to fly if they weren't heat treated. It's a critical product, and it's very important to our customer there.

Rolls-Royce is a key customer at both of those sites. They have ambitious carbon reduction targets and they want to be working — as many of our customers do — with suppliers who can really partner with them and take measurable, credible reductions in carbon emissions and support them in both greening their operations and decarbonizing their supply chains.

How are your customers reacting to this specific achievement in Bodycote's decarbonization efforts?

It's an area of growing importance. Around the world, our larger customers with global supply chains are all subject to the same pressures from their stakeholders to decarbonize both their operations and their supply chains.

By positioning ourselves as a trusted supply chain partner — helping clients reduce both their operational footprint and their supply chain emissions through outsourcing to us — we gain a real strategic advantage.

And it's seen as a real positive for our customers who have challenging carbon reduction targets and very ambitious sustainability agendas. As such, sustainability really is a core part of our corporate strategy and growth agenda.

Does Bodycote have plans to achieve similar decarbonization efforts in other facilities globally?

We're in the process of undertaking a broader evaluation of our roadmap toward net-zero transition, and these two facilities are part of a strategic pilot program. They are ideal testbeds where we prove that decarbonized or zero emissions heat treatment is possible. We are continuing in that vein, and we'll be able to announce our next zero emission heat-treatment sites in the near future.

This forms part of our global program where we're developing these sites that form blueprints for other sites to follow in their footsteps. 🔥

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